

# PATENT SPECIFICATION

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## DRAWINGS ATTACHED

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## (54) A MOP

(71) I, ANDREW TSANG NG FAI, a British Subject, of 1A, 5th Floor, Tak Hing Street, Kowloon, Honk Kong, do hereby declare the invention, for which I pray that a Patent may be granted to me, and the method by which it is to be performed, to be described in and by the following statement:—

This invention relates to a mop, particularly for household cleansing, its object being to provide an improved construction having features of (a) simple wringing out of a head for the mop, and optionally (b) simple attachment and replacement of the mop head.

According to the present invention a mop comprises an elongated handle, a mop head secured at an end of the handle, and a cover rotatable on the handle and movable along the handle into a first position remote from the mop head and into a second position in which it is engaged with the mop head, the cover having a cross-section which decreases in the direction away from an open end presented towards the mop head, the internal surface of said cover being spirally fluted.

With such a construction, the mop head is easily wrung out by pulling the handle through the cover so as to draw the mop head into the cover, and at the same time rotating the handle in relation to the cover so as to cause the mop head to be both compressed radially and twisted spirally by the fluting of the cover.

In a preferred embodiment, the cover comprises a handle portion which is a sliding fit on the handle of the mop, and a bell portion carried by the handle portion.

The mop head may be releasably secured at the end of the handle, and in a preferred arrangement means for releasably securing the mop head at the end of the handle comprise a split sleeve having its two parts coupled by a resiliently deformable loop through which the mop head is positioned, tenon-and-recess holding means being provided to act between the portions of the split sleeve and the end of the handle, and means being provided for

releasably locking the portions of the split sleeve in engagement about the end of the handle.

The releasable locking means may be a cap slidable on the handle and having internal screw-threading for engagement with external screw-threading on the split sleeve.

In the preferred embodiment, the cap has a skirt to retain the mop head in firm engagement with the loop of the split sleeve.

In order that the nature of the invention may be readily ascertained, an embodiment of mop in accordance therewith is hereinafter particularly described with reference to the figures of the accompanying drawings, wherein:—

Fig. 1 is a perspective elevation of the mop with a cover portion raised;

Fig. 2 is a perspective elevation of the mop with the cover in lowered position;

Fig. 3 is a section taken on the line III—III of Fig. 1;

Fig. 4 is a longitudinal central section of an end portion of the mop to show the manner of attachment of the mop head;

Fig. 5 is a perspective view showing the mop head in separated position.

The mop comprises a handle 1 which terminates at its upper end in a collar 2 having an eye 3 by which the mop can be hung on a hook when not in use.

At the lower end of the handle 1 there is secured a mop head 4 consisting of strands of material as well known in this art.

On the handle 1 there is slidably mounted a cover 5 which comprises a handle portion 6 supporting an elongated bell 7. The bell 7 has a relatively wide mouth 8 and its cross-section reduces towards the other end adjacent the handle 6. The wall of the bell 7 is provided with flutes 9 which appear correspondingly on the inside surface of the bell. These flutes are in a spiral formation, and may run clockwise or counter-clockwise, according to the direction of rotation preferred by the user in the course of wringing out the mop.

The handle portion 6 is a frictional sliding fit on the handle 1 of the mop, and the cover

will accordingly remain at the raised position (Fig. 1) until needed for the wringing operation. To wring out the mop head 4, the cover 5 is pushed down the handle 1 until it engages over the upper part of the mop head. Then, by a combination of further pulling of the handle, and at the same time rotating the handle 1 relative to the cover 5, the mop head is drawn into the mouth 8 of the bell and, as it progresses up the bell, is compressed and twisted at the same time, thereby expelling the maximum amount of cleaning liquid from the mop head. The twisting action causes the mop head to be wrung out as distinct from being merely compressed radially.

Referring now to Figs. 4 and 5 there are shown details of the manner of releasable engagement of the mop head on the handle 1. The handle 1 is provided near its lower end with two diametrically opposed radial holes 10. Into these holes there can be engaged the opposed lugs 11 carried respectively one on the inside of each of two halves 12a, 12b of a split sleeve 12 having its halves coupled by a resiliently bendable loop 13. The strands of the mop head 4 are engaged through the loop 13, see Fig. 5. When the mop head is attached to the handle 1, the sleeve 12 is seated about the lower end of the handle 1, and a retaining cap 14 is screwed onto the threaded outer surface 15 of the sleeve, thereby locking the sleeve lugs 11 in engagement with the handle. On the cap 14 there is provided a skirt 16 which bears on the upper part of the mop head and retains it in the proper shape and in tight engagement with the loop 13.

When it is desired to change a mop head 4, the cap 14 is unscrewed from the sleeve 12 and is pushed out of the way up the handle 1. The lugs of the two halves of the sleeve are disengaged from the holes in the handle 1, and the mop head can be taken out of the loop 13 (Fig. 5) and replaced by a new mop head.

a mop head secured at an end of said handle, and a cover rotatable on the handle and movable along the handle in to a first position remote from the mop head and into a second position in which it is engaged with the mop head, the cover having a cross-section which decreases in the direction away from an open end presented towards the mop head, and the internal surface of the cover being spirally fluted.

2. A mop, as claimed in claim 1, wherein the cover comprises a handle portion which is a sliding fit on the handle of the mop, and a bell portion carried by the handle portion.

3. A mop, as claimed in either of claims 1 and 2, wherein the mop head is releasably secured at the end of the handle.

4. A mop, as claimed in claim 3, wherein means for releasably securing the mop head at the end of the handle comprise a split sleeve having its two parts coupled by a resiliently deformable loop through which the mop head is positioned, tenon-and-recess holding means provided to act between the portions of the split sleeve and the end of the handle, and means for releasably locking the portions of the split sleeve in engagement about the end of the handle.

5. A mop, as claimed in claim 4, wherein the releasable locking means in a cap slidable on the handle and having internal screw-threading for engagement with external screw-threading on the split sleeve.

6. A mop, as claimed in claim 5, wherein the cap has a skirt to retain the mop head in firm engagement with the loop of the split sleeve.

7. A mop substantially as described herein with reference to the figures of the accompanying drawings.

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#### WHAT I CLAIM IS:—

1. A mop comprising an elongated handle,

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COMPLETE SPECIFICATION

2 SHEETS

This drawing is a reproduction of  
the Original on a reduced scale  
Sheet 1

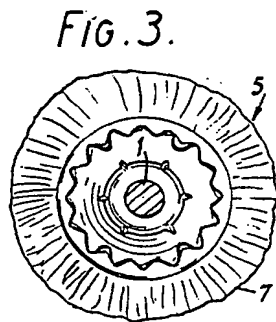
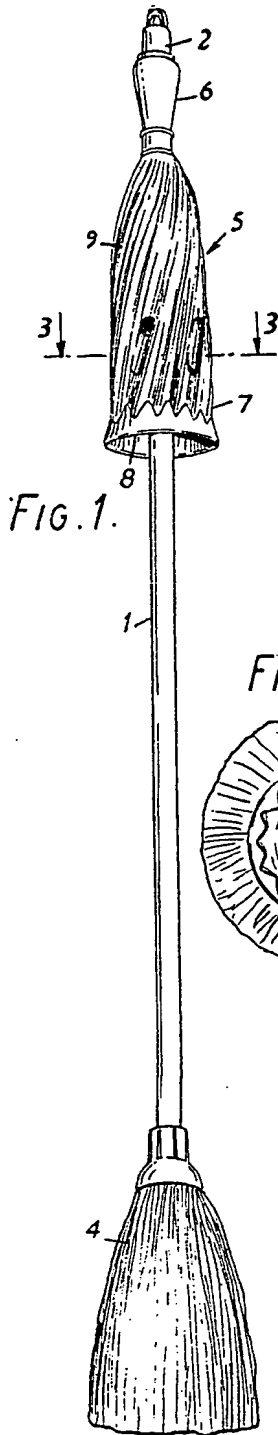


FIG. 2.

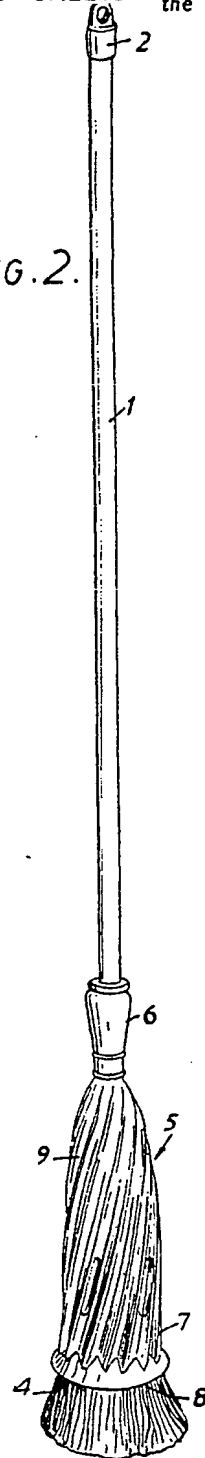


FIG. 4.

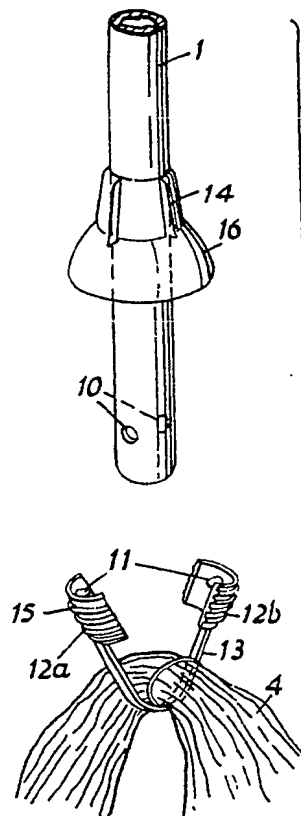
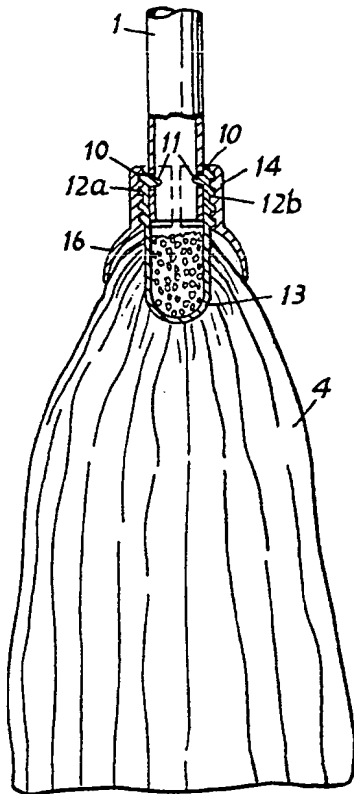


FIG. 5.